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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,473	08/13/2001	George W. Peters	TLNET. 016A	9068

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EXAMINER

WONG, ALBERT KANG

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,473

Applicant(s)

PETERS, GEORGE W.

Examiner

Albert K Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-22, and 26-27 is/are rejected.
- 7) ☒ Claim(s) 9 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This Office action is in response to applicant's letter of November 2, 2004. Claims 1-27 are pending. The restriction requirement has been withdrawn. Although the inventions are considered distinct, a preliminary search has disclosed that the claims do not present a serious burden to the Examiner.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milloy 6,305,471 in view of Bennett 6,229,448.

Regarding claim 1, Milloy teaches the use of a monitoring system for a well with a transmitter located in a potentially explosive environment. Milloy teaches on col. 5, lines 35-40 that an RF (wireless) transmitter may be used as long as it is explosion proof. It is known that electronic equipment may cause explosions in environments due to sparks formation. Equipment that uses high voltage or high power are more prone to spark formation. It would have been obvious to use a transmitter with low power consumption to avoid sparks. The host unit is shown as item 42. Milloy does not teach a relay unit or the connection to a phone system. Bennett teaches a relay unit to extend the reach of the monitoring unit to the host unit. The relay is used in a explosive environment and thus, is considered analogous art. Bennett teaches that the relay may be omitted if a limited range is sufficient and also teaches that the receiver may function as a relay by connecting to a telephone system. It would have been obvious to combine

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the teachings since both relate to the use of sensors in explosive environments. Bennett solves the problem of limited range in a low power communication system.

Regarding claims 2-3, Milloy teaches the sensing of pressure in a well.

Regarding claims 4-5, the sensing of temperature and flame are conventional in a well environment. It would have been obvious that the remote sensing of well conditions is not limited to the particular use in Milloy. Remote sensing of conditions allows the user to control and optimize operations of wells located in hostile environments.

Regarding claim 6, the particular consumption of transmitter power is an obvious design choice. A higher power transmitter would give greater range with a higher risk of explosion. Thus, the particular power would depend on the range of explosive conditions around the well.

Regarding claim 7, Bennett teaches that a repeater may use a wireless connection and that a repeater may be part of a telephone network. It would have been obvious that a telephone system would include a cellular system if a wireless system is advantageous.

Regarding claim, 8, the transmitter in Milloy is a transceiver. It would have been obvious that a relay would also have to be a transceiver to permit two-way communication.

Regarding claim 9, see col. 3, lines 65-end and col. 1.

Regarding claim 20, the steps of sensing and transmitting data to a relay unit has been discussed above. Bennett teaches the use of a monitor that switches between a sleep and an active mode

Regarding claims 21-22, this has been addressed above.

4. Claims 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett 6,229,448 in view of Milloy 6,305,471.

Regarding claim 11, the claimed monitoring unit is shown in Figure 2 of Bennett. The claimed relay unit is shown as item 26. Bennett does not teach the use of a monitoring system for a gas/oil well. (Although the limitation is merely in the preamble, which is typically given no weight, for the purposes of a complete Office action it is presumed that the body breathes life into the limitation) Milloy teaches the use of a transmitter in a well environment. As stated above, it would have been obvious to combine the references since they both pertain to the field of monitoring in an explosive environment.

Regarding claim 12, both Bennett and Milloy teach processing capability within the sensor unit.

Regarding claim 13, Milloy teaches a pressure sensor.

Regarding claim 14, Bennett teaches a temperature sensor.

Regarding claims 15-16, these limitations have been addressed above.

Regarding claim 17, it would have been obvious that a variety of communication means may be used to relay the signal including LAN lines. Wired networks are conventional in remote monitoring systems and are used where there is a large number of sensors that transmits large quantity of data.

Regarding claim 18, Bennett teaches a gas tight housing containing sensor electronics in fig 3. The transceiver is shown in the repeater in Fig. 1 which is located outside the housing but in communication with the sensor electronics. As stated above, Milloy teaches the use of transmitter system in well environments.

Regarding claim 19, the use of particular transmitter power is considered and obvious design choice since it is not critical to the invention.

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5. Claims 10 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 26 and 27, the term "low power" is considered indefinite since there is no clear line of demarcation.

8. Claims 26-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. Claims 24-25 are allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K Wong whose telephone number is 571-272-3057. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Albert K. Wong
February 6, 2005